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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,497	09/08/2003	Trevor Garner	112025-0534	9344
24267	7590	06/26/2007	EXAMINER	
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210			PHAN, MAN U	
ART UNIT		PAPER NUMBER		
2616				
MAIL DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/657,497	GARNER ET AL.
	Examiner	Art Unit
	Man Phan	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/10/04.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. The application of Garner et al. for the "Header range check hash circuit" filed 09/08/2003 has been examined. Claims 1-21 are pending in the application.

2. The applicant should use this period for response to thoroughly and very closely proof read and review the whole of the application for correct correlation between reference numerals in the textual portion of the Specification and Drawings along with any minor spelling errors, general typographical errors, accuracy, assurance of proper use for Trademarks TM, and other legal symbols @, where required, and clarity of meaning in the Specification, Drawings, and specifically the claims (i.e., provide proper antecedent basis for "the" and "said" within each claim). Minor typographical errors could render a Patent unenforceable and so the applicant is strongly encouraged to aid in this endeavor.

Claim Objections

3. Claims 8, 9, 12 are objected to because of the following informalities: The claim contains the phrase "*adapted to*" (lines 4, 2, 2 respectively). It has been held that the recitation that an element is "*adapted to*" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Appropriate correction is required.

Claim Rejections - 35 USC ' 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 recites limitation "the data flow information..." in line 2,

Claim 19 recites limitation "the data flow information..." in line 2,

There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to abstract idea.

Claim 1 constitutes a machine within the meaning of § 101, however, it does not appear that applicant is seeking to patent an arrangement of mechanical elements which form a machine with intended functionality, instead and based on further analysis, it appears that applicant is seeking to patent the functionality of the search engine claimed in combination with the controller and memory of the machine. Thus to be statutory, the claim must be to a practical application and not an abstract idea. The claim recites a "*search engine*" capable of communicating with the controller and the memory, maintaining or utilizing hash tables for a plurality of "ranges". Since the search engine (functional descriptive material) does not produce a physical transformation, it must produce a useful, concrete and tangible result to establish a practical application. The functionality of the claim as written fails to produce a tangible result,

and also based on the disclosure the level of one ordinary skill cannot determine whether a useful, concrete and tangible result would take place upon execution of the search engine. Therefore, the claim is non-statutory and rejected under the doctrine of 35 U. S. C.101 as being non-statutory.

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of itself is not patentable". Rubber-Tip Pencil Co. V. Howard, 20 Wall. 498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work Gottschalk v. Benson, 175 USPQ 673,675 (S Ct 1972). It is a common place that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter Parker v. Flook, 197 USPQ 193,201 (S Ct 1978). A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459. Since Claims 8-11 and 19-22 are directed to abstract idea that do not produce a physical transformation in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U. S. C. 101. Applicant (s) is/are advised to amend the claims by specifying the claims being directed to a practical application and producing a tangible result.

Any claim not directly rejected on 35 U. S. C. 101 stands rejected due to its dependency.

Claims 1-20 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to “computer program product” or “a software routine”. The claimed “computer readable medium” product or “software routine” of claim 21 is non-statutory as at no time in the claim does applicant define the software routine. A computer program per se is not in one of the statutory categories. A computer program must be claimed in combination with an appropriate computer readable medium so that the program is capable of producing a useful, concrete and tangible result when used in a computer system

Claim 21 is direct to “a computer readable media” product which is not supported by either a specific asserted utility or a well established utility. Claim 21 merely defines “*a computer readable media product*” or “*data record for storing instructions*”, and is not directed to statutory subject matter. The claim appears to be nothing more than a signal not tangibly embodied in a manner so as to be executable and thus non-statutory for failing to be in one of the categories of invention. It’s not tangibly embodies and non-functional descriptive material - data per se. Therefore, what applicant is attempting to claim as a computer program product or data record as is known in the art. The claim is actually drawn to non-functional descriptive material stored on a machine readable medium. The description given in the specification does not cure this problem. In practical terms, claims define non-statutory processes if they simply manipulate abstract ideas, e.g., a bid or a bubble hierarchy, without some claimed practical application,

Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59; Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759.

9. Claim 21 is also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Cao et al. (US#7,072,885) is cited to show the method and apparatus for performing a binary search on an expanded tree.

The Cao et al. (US#6,826,561) is cited to show the method and apparatus for performing a binary search on an expanded tree.

The Dietz et al. (US#6,651,099) is cited to show the method and apparatus for monitoring traffic in a network.

The Sato et al. (US#2006/0059196) is cited to show the bit string check method and device.

The Rosenfeld et al. (US#7,027,446) is cited to show the method and apparatus for set intersection rule matching.

The Lin et al. (US#6,965,945) is cited to show the system and method for slot based arl table learning and concurrent table search using range address insertion blocking.

The Barach et al. (US#2004/0230696) is cited to show the bounded index extensible hash-based IPV6 address lookup method.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

06/20/2007.



MAN L. PHAN
PRIMARY EXAMINER